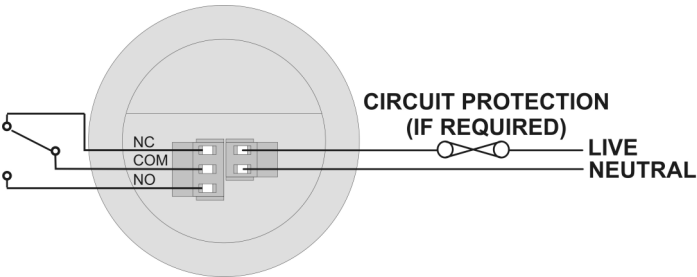
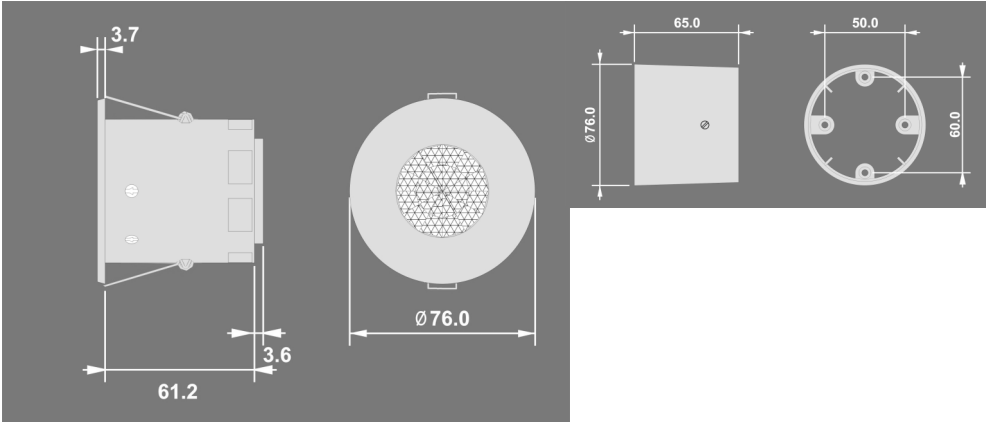


EBDSPIR-VFC

Ceiling Presence Detector



Overview

The EBDSPiR series of presence detector switches are designed to provide automatic control of lighting, heating or ventilation loads. They detect movement using a PIR sensor and turn the load on. When an area is no longer occupied the load will switch off after an adjustable time out period.

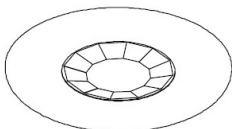
An optional adjustable internal light sensor provides additional energy saving in lighting applications. When an area is occupied lighting is only switched on when the level of natural light is below a preset level.

When the unit is first powered up the PIR sensor will always detect immediately regardless of whether the room is occupied.

This unit has a mains voltage power supply and provides an isolated voltage free contact output.

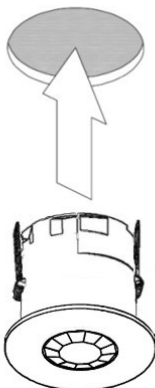
FLUSH FIXING

Warning - be careful bending springs when mounting unit.

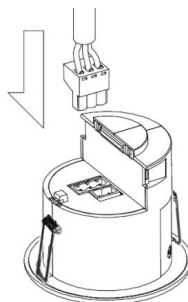


1

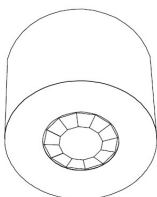
Hole Ø64mm



2

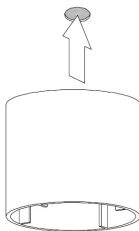


SURFACE FIXING

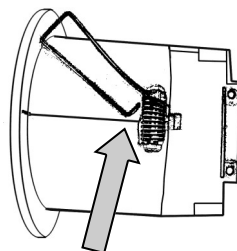


1

50mm or 60mm fixing centres



2

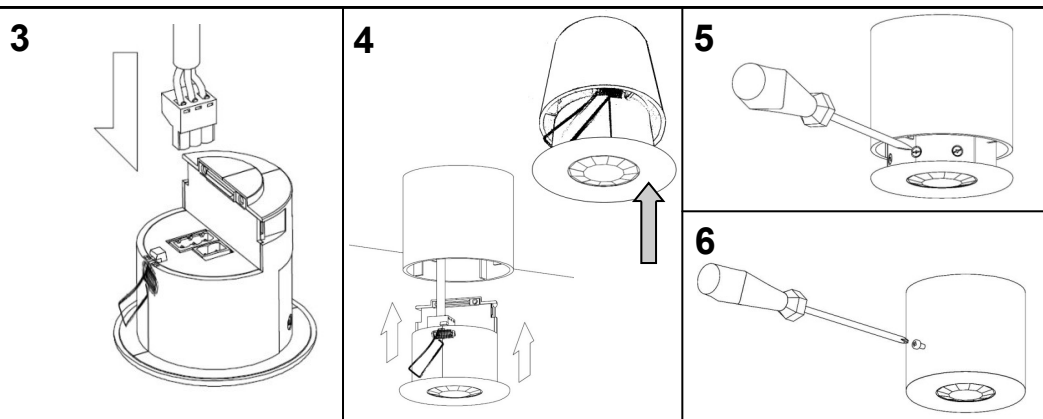
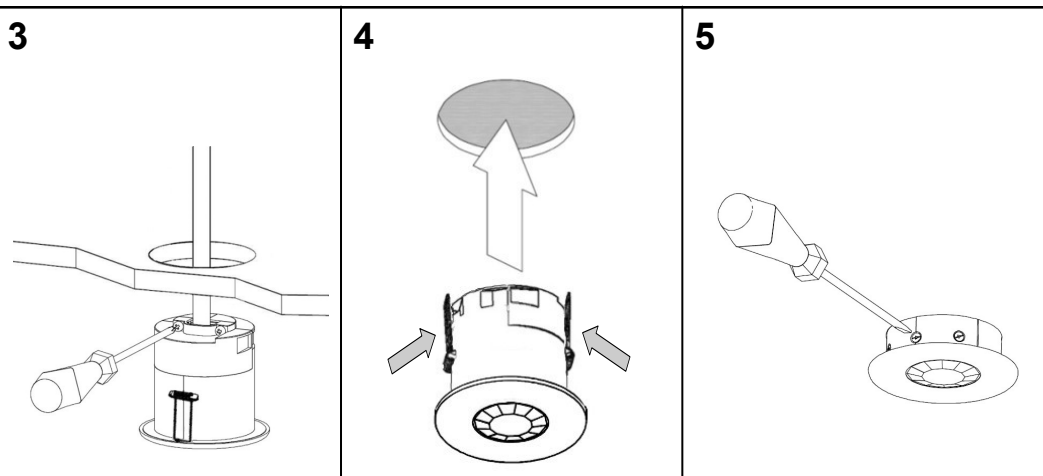


Pull out spring tab and rotate spring arm as shown

Installation

- The detector should be sited so that the occupants of the room fall inside the detection pattern shown overleaf, at a recommended height of 2.8m on the ceiling. Note that the lower the sensor is installed the smaller the detection range will be, subject to the parameters shown on the diagram.
- Avoid direct sunlight entering the sensor.
- Do not site within 1m of forced air heating or ventilation.
- Do not site within 1m of any lighting.
- Do not fix to a vibrating surface.
- Wire the product using the connector using the diagram on the front page.
- Mount using one of the two options above.

- For lux enabled products, set the minimum.
- Power the unit up—the load should be on.
- Vacate the room or remain very still (should take no more than 2 minutes).
- Check that the load switches on.
- To set the final LUX level wait until the room is dark enough that lighting is required. Then, with the lights on, set the level (at minimum), very slowly the lights come on. Note that when the lights come on, the lights will **always** come on with the next light level.
- Set the time required.



the LUX level to maximum and the time to
 would come on immediately.
 still and wait for the load to switch off
 (utes).
 when movement is detected.
 until the level of natural daylight is just
 Starting with the LUX control fully clock-
 turn the control anti-clockwise until the
 the LUX control is at maximum then the
 occupancy.

Fault Finding

LOAD DOES NOT COME ON

Check to see if the live supply to the circuit is good.
 If the supply and wiring are good, for lux enabled versions, check the LUX level setting. Increase the LUX level setting to allow the controller to turn on at higher ambient natural light level.

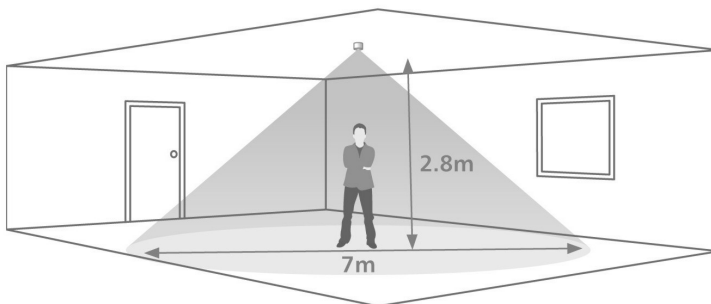
If the detection range is smaller than expected, check the diagram above. Rotating the sensor slightly may improve the range.

LIGHTS DO NOT GO OFF

Ensure that the area is left unoccupied for longer than the selected timer setting.

Make sure that the sensor is not adjacent to circulating air, heaters or lamps.

Detection Pattern



Area of high sensitivity  Area of lower sensitivity 

Specification

LOAD

Normally closed contact

2 Amp maximum

Minimum load 100mA

Normally open contact

6 Amp fluorescent lighting and resistive

3 Amp compact fluorescent lighting

3 Amp low energy lighting

3 Amp low voltage lighting (switch primary of transformer)

Fluorescent lighting (max 6 fittings recommended)

For fluorescent lighting total power factor correction capacitance must not exceed 40µF.

3 Amp fans and ventilation equipment

Switch SON lighting loads via a contactor

Minimum load 100mA

SUPPLY VOLTAGE 220-240 Volts AC 50 Hz

TIME OUT PERIOD Adjustable 10s to 30m


LIGHT LEVEL Light to dark

TERMINAL CAPACITY 2.5 mm²

MATERIAL Flame retardant ABS

TYPE Class 2

TEMPERATURE -10°C to 35°C

CONFORMITY EMC-89/336/EEC 

Part Numbers

EBDSPIR-VFC

Ceiling mounted
presence detector
voltage free out-
put contact
Surface mounting
back box

DBB

IMPORTANT NOTICE!

This device should be installed by a qualified electrician in accordance with the latest edition of the IEE wiring regulations.



C.P. Electronics Ltd

Brent Crescent

London

NW10 7XR

United Kingdom

Tel: + 44 (0) 333 900 0671

Fax: + 44 (0) 333 900 0674

www.cpelectronics.co.uk

enquiry@cpelectronics.co.uk

Due to our policy of continual product improvement CP Electronics reserves the right to alter the specification of this product without prior notice.

Ref #WD234 Issue 3